

## ABSTRACT

Of any one of transmission method X of transmitting modulated signal A and modulated signal B including the same data from a plurality of antennas and transmission method Y of transmitting modulated signal A and modulated signal B having different data from the plurality of antennas, base station apparatus 201 does not change the transmission method during data transmission and changes only the modulation scheme. Base station apparatus 201 transmits modulated signal A and modulated signal B to communication terminal apparatus 251 using the determined transmission method and modulation scheme. In this way, it is possible to improve data transmission efficiency when transmitting data using the plurality of antennas.